

## The Music Producer's Survival Guide

- ▷ 1874: Elisha Grey publicly demonstrates the Musical Telegraph, the first synthesizer.
- ▷ 1876: Alexander Graham Bell patents the telephone, and has better lawyers than the other inventor, Elisha Grey.
- ▷ 1877: Thomas Edison invents the phonograph.
- ▷ 1877: Emile Berliner patents the "flat disc" gramophone, paving the way for replication.
- ▷ 1892: GE is founded at the end of the "current wars" with Nikola Tesla's AC and Thomas Edison's DC.
- ▷ 1892: Emile Berliner founds the United States Gramophone Company (later called the Victor Talking Machine Company/RCA).
- ▷ 1896: Guglielmo Marconi patents radio (see 1944).
- ▷ 1888: American Gramophone Company (formerly Volta Gramophone Company, later Columbia/CBS) is the first to sell pre-recorded records.
- ▷ 1889: The first jukebox appears, created by Louis Glass, manager of Pacific Phonograph Company in San Francisco.
- ▷ 1898: Fred Gaisberg becomes the first ever "producer" and A&R exec, for London Gramophone Company (later HMV and EMI).

## Epoch 3: The 20th Century

- ▷ 1903: The Wright brothers accomplish the first successful airplane flight.
- ▷ 1905: Albert Einstein publishes a paper with his famous equation  $E=mc^2$ , asserting that matter and energy are the same thing.
- ▷ 1906: Lee De Forest invents the Audion amplifying vacuum tube.
- ▷ 1914: Germany's Merck patents 3,4-methylenedioxy-N-methamphetamine, commonly known as MDMA.
- ▷ 1922: The Motion Picture Association of America (MPAA) is founded.
- ▷ 1923: Edwin Hubble not only discovers that the Milky Way is not the only galaxy, but is in fact one of many, but also that the universe is expanding at an accelerated rate.
- ▷ 1924: Bell Labs is founded.
- ▷ 1928: Philo Farnsworth demos the first working television system.
- ▷ 1931: Alan Blumlein develops stereophonic sound at EMI.
- ▷ 1931: RCA Victor releases the first "long-play" records, at 33 $\frac{1}{3}$  RPM.
- ▷ 1933: Harvey Fletcher and Wilden A. Munson publish a paper defining "loudness."
- ▷ 1936: Alan Turing defines computers as being able to calculate any calculable function, what is commonly referred to as "Turing complete."
- ▷ 1938: Swiss chemist Albert Hofmann synthesizes D-lysergic acid diethylamide, commonly known as LSD.
- ▷ 1939-1945: World War II. Computers are developed to crack the Nazi's "Enigma" code.
- ▷ 1941: Grace Hopper creates the first compiler for a computer programming language.
- ▷ 1942: RCA awards the first gold record to Glen Miller for "Chattanooga Choo Choo."
- ▷ 1944: The U.S. Supreme Court rules that 15 of 16 radio patents filed in 1896 by Guglielmo Marconi infringed on Nikola Tesla's patents.
- ▷ 1946: The ENIAC, the U.S. Army's first digital and Turing-complete computer, is revealed.
- ▷ 1947: Bell Labs creates the first working transistor.
- ▷ 1948: Claude Shannon at Bell Labs publishes a paper that launches the field of information theory, making the digital age possible.
- ▷ 1948: Les Paul invents "sound on sound" and pioneers overdubbing, a multitrack recording technique essential to modern production, in his home studio.
- ▷ 1952: The Recording Industry Association of America (RIAA) is founded.
- ▷ 1957: Max Matthews at Bell Labs invents computer-based audio recording.
- ▷ 1962: Philips invents the compact cassette tape format.
- ▷ 1964: The Stereo 8 consortium develops the 8-track tape format (based on RCA's magazine loading cartridge from 1958).
- ▷ 1969: The first message sent via ARPANET, the precursor to the Internet.
- ▷ 1969: Neil Armstrong becomes the first human to walk on the moon.
- ▷ 1971: Intel releases the first commercially available microprocessor, the 4004.
- ▷ 1975: Apple Computer and Microsoft are founded.
- ▷ 1980: Sony and Philips publish the "Red Book" outlining the CD-DA format.
- ▷ 1983: The MIDI spec is published.
- ▷ 1984: Steinberg, Digidesign, MOTU, and Opcode (1985) are founded.
- ▷ 1988: The Moving Picture Experts Group (MPEG) format is created as part of ISO.
- ▷ 1990: NASA launches the Hubble Space Telescope into orbit.
- ▷ 1992: CERN's HTTP protocol and the World Wide Web (WWW) join the Internet.
- ▷ 1993: Fraunhofer's MPEG ISO Layer-3 is given a file extension, .mp3.
- ▷ 1999: Napster is born.
- ▷ 1999: This year marks the historical peak of CD sales, according to the RIAA.
- ▷ 2000: The Y2K scare, a.k.a. the Millennium Bug, quietly comes and goes.